

REMARKS

I. Status of the Claims

Claims 29-36 are pending in the application, claims 1-28 and 37-105 having been canceled. The claims are rejected, variously, under 35 U.S.C. §112, first paragraph, 35 U.S.C. §112, second paragraph, and 35 U.S.C. §102. the specific grounds for rejection, and applicants' response thereto, are set out in detail below.

II. Objections

The examiner has objected to the IDS submission as not providing an English translation of a foreign language reference. Applicants are citing this German reference as it was cited in the parent prosecution, U.S. Serial No. 09/911,077, in the office action dated October 3, 2003, and in particular for its disclosed sequences at page 11, said sequences NOT being in a foreign language.

The examiner has objected to the specification as failing to comply with sequence listing requirements. An amendment inserting sequence identifiers into the legends for FIGS. 2 and 4 and to add the sequence for ChCoT, *Limulus polyphemus*, are being prepared and will be provided at a later date.

The examiner has objected to the specification for a variety of reasons. First, the status of referenced patent applications is requested. An amendment has been provided. Second, the presence of embedded hyperlinks is noted. An amendment has been provided. Third, the brief description of the drawings is said to omit reference to FIGS. 11C, 11D, 14A and 14B. Amendments have been provided. Fourth, the "in press" reference at page 3, line 10 is said to

need updating. An amendment has been provided. And fifth, a new title has been suggested. An amendment has been provided.

The examiner has objected to claim 29 as missing the word “acid.” An amendment has been provided correcting the error.

III. Rejections Under 35 U.S.C. §112, First Paragraph

A. Enablement

Claims 29-36 are rejected as lacking an enablement. The rejection is directed to this issue of whether the specification enables anything beyond SEQ ID NOS:3 and 4. Applicants traverse, but in the interest of advancing the prosecution, claims 29, 30, 34 and 35 have been amended to recite SEQ ID NOS:3 and 4. The remaining claim subject to the rejection is claim 36, which is canceled.

B. Written Description

Claims 29-36 are rejected as lacking an adequate written description. The grounds for rejection here appear to be essentially the same as set forth above for the enablement rejection. As such, applicants believe the provided amendments address this rejection as well.

III. Rejection Under 35 U.S.C. §112, Second Paragraph

Claims 29-34 are rejected as indefinite under §112, second paragraph, for use of the term “comprising essentially” Amendments have been provided that remove this language, thereby overcoming the rejection.

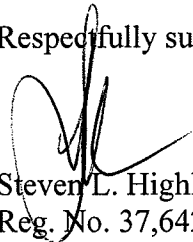
IV. Rejection Under 35 U.S.C. §102

Claims 29-36 are rejected over one or both of Okuda *et al.* and Haga *et al.* Claim 36 has been canceled, and claims 29, 30, 34 and 35 have been amended to recite either SEQ ID NO:3 or 4. Therefore, the issue of derivatives or variants is obviated, as is the question of limited segments of homology. As such, applicants believe the rejection has been overcome.

V. Conclusion

In light of the foregoing, applicants respectfully submit that all claims are in condition for allowance, and an early notification to that effect is earnestly solicited. Should the examiner have any questions regarding this submission, applicants invite a call to the undersigned at the number listed below.

Respectfully submitted,



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